

Economic Growth in Farming Areas Lags the Rest of Rural America

Fewer counties depend on farming for a large share of their income than was once the case. Growth in employment and population has lagged other nonmetro areas, as many farming counties struggle to adapt to a changing rural economic landscape. Retaining population, enhancing off-farm job opportunities, and providing public services will be pivotal determinants of the future of farming counties.

Farming areas have participated in the 1990's overall employment and population growth but not to the extent of other nonmetro areas. Population in many farming areas is still declining. Shrinking local economies spell continued uncertainty for sparsely settled farming communities unless nonfarm jobs are added.

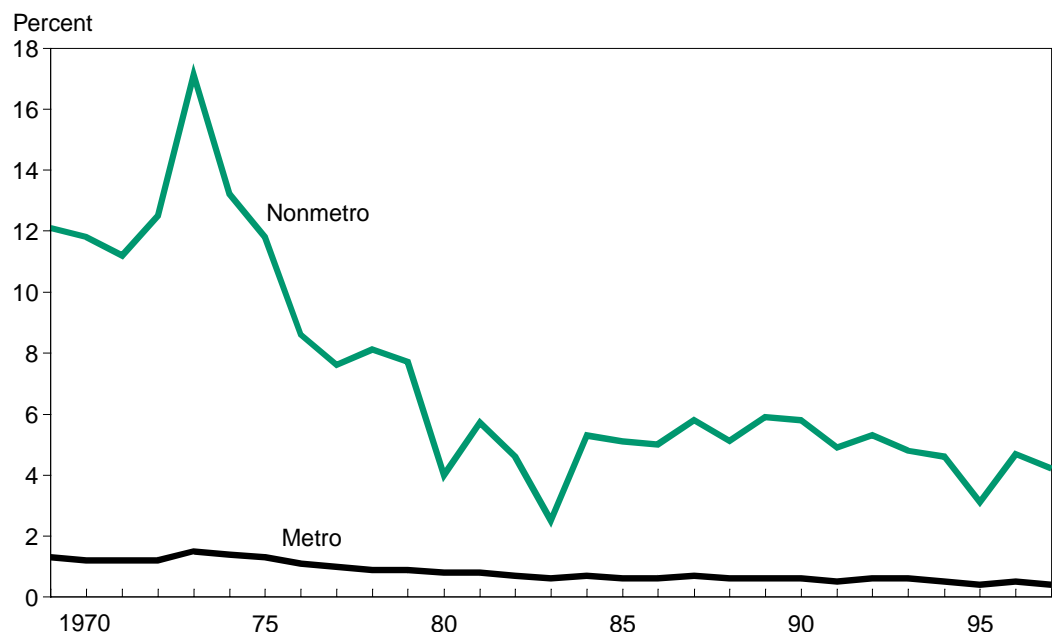
The proportion of total labor and proprietor income (LPI) that comes from farming in non-metro economies declined substantially through the mid-1980's but has remained relatively stable in the 1990's (fig. 1). Since the early 1980's, ERS has used this measure as an indicator of the relative importance of farming to local economies. Increased productivity and structural change in the farming sector has contributed to continued decline in farm employment since 1935, and the decline is expected to continue for the foreseeable future. Growth in the number of nonfarm businesses, first manufacturing and then services, has greatly expanded the rural employment base. Thus, farming is no longer a dominant source of jobs or income in most rural communities as it was 50 years ago.

Farming contributes 10 percent or more of county-earned income for about one-fourth of nonmetro counties, clustered largely in our Nation's heartland (fig. 2). These are the communities likely to be affected the most by changes in farm financial conditions. Not only does farming have a relatively large economic presence, but the farm commodities produced are those most susceptible to price fluctuations in international markets. Federal agricultural commodity programs have historically played an important role in the farm economy of these counties. Many farming areas have not participated in the industrial diversification of America's rural economy. Therefore, they have a unique economic personality. At the same time, they represent a remnant of rural America's past.

Figure 1

Farming share of local personal income, metro and nonmetro counties, 1969-97

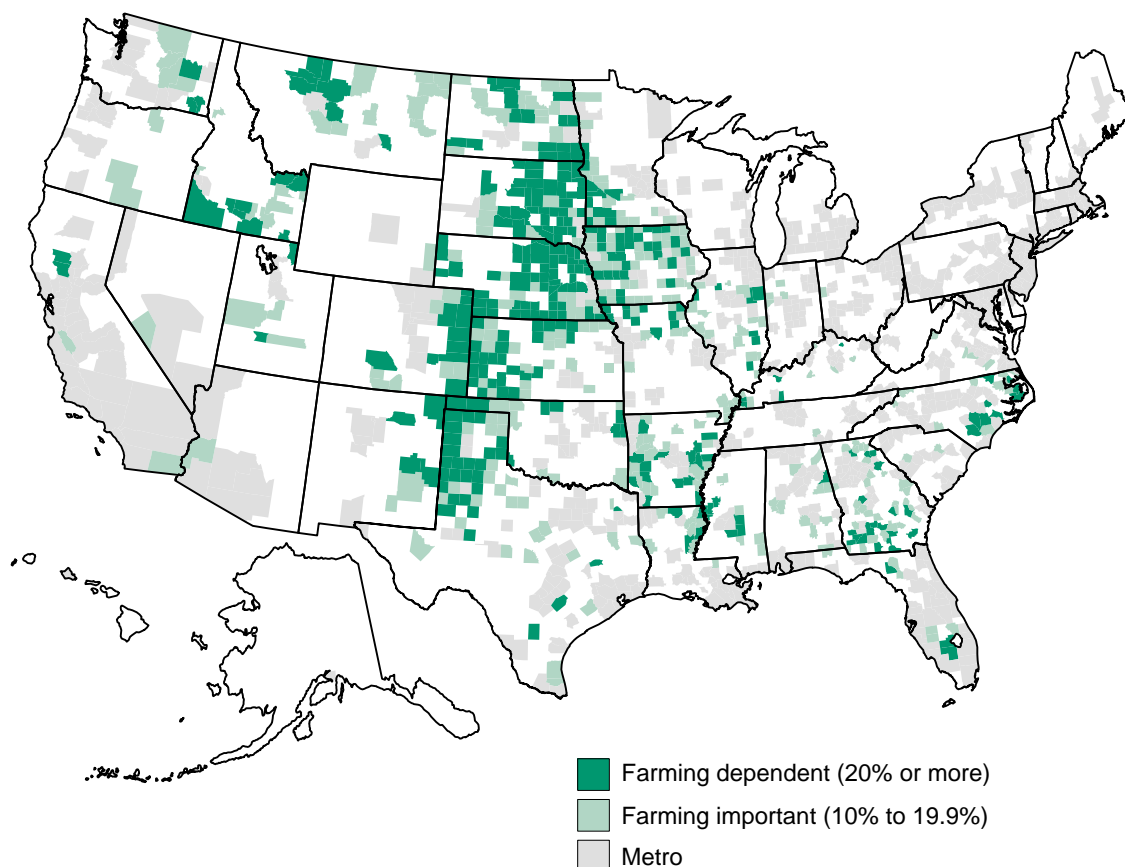
The share of income from farming has been relatively steady during the 1990's



Note: Chart shows the proportion of total labor and proprietor income (LPI) that comes from farming.

Source: ERS analysis of data from the Bureau of Economic Analysis.

Figure 2

Nonmetro counties with at least 10 percent of income from farming*Most counties that rely on farming are in the Nation's heartland*

Note: Farming-dependent counties derived at least 20 percent of labor and proprietor income (LPI) from farming. Farming-important counties derived 10 to 19 percent of LPI from farming.

Source: Prepared by ERS using data from the Bureau of Economic Analysis.

We look at two groups of counties with relatively high dependence on farming. ERS classifies nonmetro counties that obtain at least 20 percent of LPI from farming as “farming-dependent.” In the mid-1990’s, there were 316 counties in the farming-dependent category, down from 556 in 1989. Another 312 nonmetro counties have a farm income share of 10 to 19.9 percent, and are classified as “farming important” (see box, “Farm Income Share Used To Classify Counties”).

Farming-Dependent Counties Experience the Slowest Growth

Average county per capita income in farming-dependent counties is higher than in other nonmetro areas (table 1). Earned income contributes about 62 percent of total personal income, while the remainder comes from unearned sources such as dividends, interest, and rent and transfer payments. Farming in these counties contributes about 30 percent of earned income, a percentage that has remained relatively constant throughout the 1990’s. It continues to be true that average farm earnings are higher in farming-dependent counties. Average earnings per farm job were \$34,300 in farming-dependent counties, compared with \$14,550 for the rest of nonmetro counties in 1997. The average farm (measured by total value of agricultural products sold) is larger in farming-dependent counties (table 2). Farms in these counties produced 18.2 percent of all agricultural products sold in 1997. With relatively few nonfarm jobs available in farming-dependent coun-

Table 1

Characteristics of counties by farming dependence

The more dependent a county was on farming, the less it participated in employment and population growth in the 1990's

Item	Farming- dependent	Farming- important	Other nonmetro
Number of counties	316	Number 312	1,662
Total employment, 1997	1,347	Thousands 2,328	24,359
Employment by industry: ¹		Percent	
Goods producing—	37.2	35.9	29.5
Farming	18.3	12.0	5.3
Manufacturing	10.6	15.7	16.2
Other	8.4	8.2	7.9
Services—	61.1	62.3	68.7
Business services ²	12.3	11.8	11.7
Retail trade	14.0	15.5	17.6
Government	16.1	15.2	15.9
Other	18.7	19.8	23.5
Employment change, 1980-90	-1.6	6.8	14.1
Employment change, 1990-97	11.3	13.6	14.1
Employment change by industry:			
Goods producing—	4.4	6.4	3.7
Farming	-6.4	-6.8	-6.9
Manufacturing	12.4	14.5	4.4
Other	24.7	14.6	10.5
Services—	13.9	16.8	17.7
Business services ²	9.2	12.6	14.4
Retail trade	20.1	20.4	21.2
Government	7.2	8.9	6.9
Other	19.0	23.7	25.2
Average per capita income, 1997	19,413	Dollars 18,489	19,131
Population, 1998	2,692	Thousands 4,631	47,218
Population change:		Percent	
1990-98	2.6	6.1	7.4
1980-90	-6.5	-1.5	3.8
Net migration:			
1990-98	.9	3.4	4.4
1980-90	-10.6	-6.5	-1.9
Proportion of counties with population loss:			
1990-98	57.6	39.4	21.0
1980-90	85.8	71.2	44.9

¹Percentages do not sum to 100, due to suppression.

²Includes transportation, public utilities, wholesale trade, finance, insurance, and real estate.

Source: ERS analysis of data from the Bureau of Economic Analysis and the Bureau of the Census.

Table 2

Characteristics of farms by county farming dependence, 1987-97

The more dependent a county was on farming, the larger the decline in the number of farms and the increase in sales per farm

Item	Unit	Farming-dependent	Farming-important	Other nonmetro
Farms, 1997	Thousands	166.3	186.2	940.2
Share of all farms	Percent	8.7	9.7	49.2
Farms, 1987	Thousands	190.0	208.2	1,007.7
Change in farms, 1987-97	Thousands	-12.5	-10.6	-6.7
Market value of agricultural products sold, 1997	Billion dollars	35.9	27.9	66.4
Average sales per farm, 1997	1,000 dollars	233.9	161.2	69.2
Average sales per farm, 1987	1,000 dollars	131.6	94.8	46.0
Average land area in farms, 1997	Percent	78.4	66.5	34.4

Source: ERS analysis of data from the Census of Agriculture.

ties, farm operators are more likely to expand the size of their farms in order to maintain household income. As a result, the number of farms in these counties declined by 12.5 percent between 1987 and 1997, while the average farm's sales have increased by 78 percent, according to the Census of Agriculture.

As a group, farming-dependent counties experienced 11.3 percent job growth during 1990-97. This is in sharp contrast to the employment declines in these counties during the 1980's, although farming-dependent counties added jobs at a slower rate than other nonmetro areas (table 1). And job growth during the 1990's has not been in farming: farming-dependent counties lost farm jobs at a rate of 6.4 percent in 1990-97. Growth has occurred, however, in agricultural services, manufacturing, and services.

As a whole, goods-producing industries (farming, agricultural services, manufacturing, mining, and construction) provide a higher proportion of jobs in farming-dependent counties than in the other county types—although farming-dependent counties have relatively few manufacturing jobs. It follows that service sector jobs are a smaller share of employment in farming-dependent counties. The relative scarcity of service jobs in these counties is in large part responsible for their weak employment growth, since growth in service sector jobs drove overall employment growth in the 1990's.

While over 60 percent of jobs are in service industries, service jobs contribute only half of earned income, suggesting that wages in this sector are relatively low. In fact, earnings per service job in farming-dependent counties were only 87 percent of the rest of nonmetro counties. Farming-dependent counties have a smaller proportion of service jobs in retail trade and other services (which include health, educational, recreational, and social services). This likely reflects the small and shrinking population base in many farming-dependent counties.

About 2.7 million people (5 percent of the nonmetro population) lived in farming-dependent counties in 1998. Population growth between 1990 and 1998 averaged 2.6 percent. About one-third of this growth was due to net migration; the remainder was due to natural increase (births exceeding deaths). This is a sharp turnaround from the 6.5-percent population decline of the 1980's, a period of heavy population outmigration. Counties that have grown are located in the eastern part of the Corn Belt, the South, and the Rocky Mountains where nonfarm job opportunities are growing or where people are migrating in order to enjoy scenic landscapes. Some farming-dependent counties located along the Platte River in Nebraska and around Garden City, Kansas, have grown as a result of new jobs in meatpacking. Value-added manufacturing such as meatpacking has helped some

farming areas expand their employment base and attract immigrants. Nevertheless, more than half of farming-dependent counties lost population during the 1990's. Those losing population were in the Plains, an area that has been losing population for decades.

It appears that many farming-dependent counties will have difficulty maintaining a large enough population base to support community services. Economic growth during the 1990's has favored more urban places, even within nonmetro America. Many farming-dependent counties are remote from urban growth nodes, and have low population densities. There is, however, some evidence that telecommunications has helped to overcome the distance problem, particularly for farming-dependent counties in the Rocky Mountains, which offer scenic beauty often sought by migrants to rural areas.

Farming-Important Counties Fare Better

Jobs grew faster in farming-important counties than in farming-dependent counties during 1990-97. Employment grew 13.6 percent, double the growth rate during the 1980's. Most farming-important counties are adjacent to farming-dependent counties, and some were formerly classified as farming-dependent counties in 1989. Manufacturing has a larger presence in these counties, as does the service sector. This suggests that farming-important counties have been able to expand their nonfarm employment base in order to retain or attract population. For these counties, strong job growth in manufacturing and services (especially health, educational, and recreational services) offset lost jobs in farming.

Farms in farming-important counties produced about 14 percent of the Nation's agricultural products in 1997. The number of farms in these counties declined by 10.6 percent over the 1987-97 period, slower than the decline in farming-dependent counties. The availability of off-farm jobs often helps farm households maintain income while continuing farming.

Relative to farming-dependent counties, farming-important counties have experienced robust population growth during the 1990's. Net immigration has contributed over half this growth. Places like the Ozark-Ouachita Mountains in Arkansas and the Rocky Mountain Front offer natural amenities sought by rural immigrants. Still, about 40 percent of the farming-important counties, many in the High Plains, continued to lose population during the decade.

Number of Farming-Dependent Counties Declined Since 1989

ERS last identified farming-dependent counties in 1989, using farm earnings over the 1987-89 period. Of the previous 556 farming-dependent counties, 275 are included in our updated analysis. Thus, 281 counties previously defined as farming-dependent are not so classified in this article. Of these 281 counties, 134 are now classified as farming-important. Rapid growth in manufacturing jobs is the one feature that differentiates these counties from our farming-dependent counties. Another 104 counties moved out of our two farming groups altogether. Job growth in these counties was unusually high in other services (health, educational, recreational, and social services) and other goods-producing (construction and mining) sectors. Finally, 43 former farming-dependent counties had negative farm earnings (farm losses) during 1994, 1996, and 1997. Given that over a fifth of their total employment is in farming, these sparsely settled counties would likely be classified as farming-dependent had the farm losses not occurred.

Forty-one new counties joined our farming-dependent category. These counties resemble our farming-important group in terms of employment structure and population size. A number of counties have a ratio of farm LPI to total LPI that is close to 20 percent. Thus, a small change in either farm earnings or nonfarm earnings could shift a county into farming-dependent status. [Kathleen Kassel, 202-694-5428, kkassel@ers.usda.gov; Thomas Carlin, 202-694-5406, tcarlin@ers.usda.gov]

Farm Income Share Used To Classify Counties

The Bureau of Economic Analysis, U.S. Department of Commerce, compiled the data used to classify counties. Farm labor and proprietor income includes the net income of farm operators (proprietors) and wages paid persons employed on farms. Total labor and proprietor income (LPI) includes the earnings of all proprietorship business (farm and nonfarm) in the county plus wages paid all persons working in the county. LPI also includes some nonwage but work-related income items such as employer contributions to life and health insurance.

Farming-Dependent Counties are the 316 counties where farming constituted 20 percent or more of a county's LPI in 1994, 1996, and 1997. *Farming-Important Counties* are the 312 counties where farming constituted 10-19 percent of LPI for those years. A 3-year average was used to "smooth over" year-to-year variability in farm income. The years chosen had the highest net income in the 1990's. Because of unusual conditions that reduced farm income in 1995, data from that year were excluded. A cool, wet spring delayed planting of many crops, and hot summer weather and an early frost also reduced crop production. Corn production, for example, declined by 25 percent from the 1994 record crop. Carryover stocks were rather large coming into the year. Thus, when output declined, inventories were drawn down, further lowering net farm income. Also, livestock prices fell throughout the year.

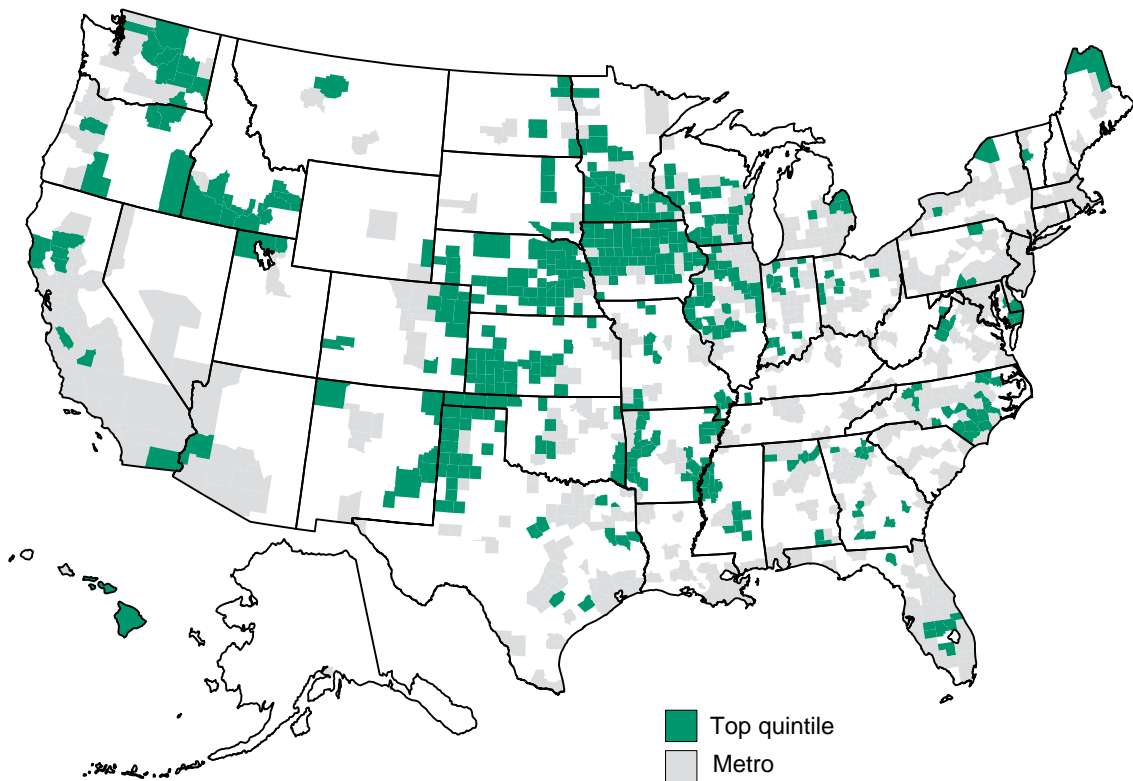
Replicating the earlier ERS classification using more recent revised Bureau of Economic Analysis (BEA) data yields 406 farming-dependent counties in 1987-89, not 556. Revisions in the data account for over half of the 281-county decrease in the number of farming-dependent counties. BEA continually revises county income estimates (both farm and nonfarm) as new information becomes available or as new estimating procedures are introduced. Even after adjusting for data revisions, the decline in the number of farming-dependent counties is substantial, particularly given that we chose the years with the highest farm income during the 1990's for analysis.

Our measure is a gauge of the importance of farming to the local economy. It is not a measure of the top agricultural counties in the Nation, as might be measured by the market value of agricultural products sold from farms (see fig. 3). There are, however, overlaps between the two concepts. For example, Iowa has 60 counties—clustered in the northern region of the State—among the top quintile of nonmetro counties ranked by the market value of agricultural products sold in 1997. Of these, 50 are also classified as farming-dependent or farming-important counties. On the other hand, most of the nonmetro counties in eastern South Dakota are farming-dependent or farming-important, but few of them are in the top quintile of nonmetro counties ranked by farm sales.

Figure 3

Leading nonmetro counties in market value of agricultural products sold, 1997

Many but not all farming-dependent and farming-important counties (see fig. 2) are top ranked in sales



Note: Chart shows the top 20 percent of nonmetro counties ranked by market value of agricultural production.
Source: Prepared by ERS using data from the Census of Agriculture.